

IN THE CLAIMS

Presented below are all of the pending claims.

1 1. (Cancelled).

1 2. (Currently amended) An apparatus, comprising:
2 a metal-oxide-semiconductor transistor;
3 a metallic gate electrode coupled to a diffused gate region of said
4 metal-oxide-semiconductor transistor and to a positive power supply
5 voltage ~~source~~ trace; and
6 a metallic source electrode and a metallic drain electrode coupled
7 to said metal-oxide-semiconductor transistor and to each other and to a
8 negative power supply voltage ~~source~~ trace, wherein said metal-oxide-
9 semiconductor transistor includes the diffused gate region formed from
10 material with a work function less than - 0.56 volts.

1 3. (Previously amended) The apparatus of claim 2, wherein
2 said material of said diffused gate region is platinum silicate.

1 4. (Previously amended) The apparatus of claim 2, wherein
2 said material of said diffused gate region is selected from the group
3 consisting of tantalum nitrate, iridium, nickel, and arsenic.

1 5. (Previously amended) The apparatus of claim 2, wherein
2 said metal-oxide-semiconductor transistor includes a heavily-doped
3 substrate area.

1 6. (Previously amended) The apparatus of claim 2, wherein
2 said metal-oxide-semiconductor transistor is a p-channel device.

1 7. (Previously amended) The apparatus of claim 2, wherein
2 said metal-oxide-transistor is an n-channel device.

1 8 through 19. (Cancelled)

1 20. (Currently amended) An apparatus, comprising:
2 a metallic gate electrode ~~to~~ coupled to a positive power supply
3 voltage trace;
4 a diffused gate region formed from a material whose
5 work function is less than minus 0.56 volts coupled to
6 said metallic gate electrode;
7 a gate insulator area coupled to said diffused gate region;
8 a channel area coupled to said gate insulator area;
9 a diffused drain area coupled to said channel area; and
10 a diffused source area coupled to said channel area.

1 21. (Previously added) The apparatus of claim 20, wherein said
2 material is platinum silicate.

1 22. (Previously added) The apparatus of claim 20, wherein said
2 material is selected from the group consisting of tantalum nitrate,
3 iridium, nickel, and arsenic.

1 23. (Previously added) The apparatus of claim 20, further
2 comprising a substrate which is heavily-doped.